Review report of a final thesis

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Thesis title: RPA and OCR integration
Branch / specialization: Web and Software Engineering
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Evaluation criteria

1. Fulfillment of the assignment

- [1] assignment fulfilled
- [2] assignment fulfilled with minor objections
- [3] assignment fulfilled with major objections
- [4] assignment not fulfilled

The assignment has been fulfilled. However, the text part repeatedly violates citation ethics.

2. Main written part

The thesis is well-structured, and it follows the objectives. Only Section 3.2.1 (What is OCR?) is confusing because OCR has been discussed in the previous chapter. Exceptionally, the flow is misleading, e.g., the statement ‘I will explain’ (p. 4) referencing the previous section.

Unfortunately, the citations are often not in accordance with citation practices and standards: paragraph vs. sentence citation issues, paper citation issues, or direct quote issues. E.g., the sentence ‘One of our members, Dedan Kanyuira, says...’ (p. 3) is not clearly cited, and I think that Mr. Dedan Kanyuira is not a co-author of the thesis. The format of citations is not consistent.

Moreover, the citation ethics has been violated.
- On page 8, the author states: ‘I will briefly define the application of each of the above-mentioned components in the UiPath framework.’ The definitions have not been cited, and I have found the same ones in Tripathi, A. (2018). Learning robotic process automation. Packt Publishing.
- The initial paragraphs of Section 3.2.1 are plagiarism. The potential source: NICE. What
— I expect definition references in Section 3.1.1 (What is Neural Network?).

Other comments follow.
— The work with abbreviations/acronyms is confusing even in the English abstract and introduction chapter. Also, ‘O2C’ used in the keywords is not defined, and it is not part of the list of acronyms (Appendix A). Similarly, ‘VB’ in Section 5.2.
— Chapter 8 deserves an introductory paragraph.
— The author inconsistently uses the first person plural and singular.
— The thesis lacks formatting. I suggest using at least a formatting of keywords throughout the text. There is also a problem with special characters, e.g., p. 32.
— The thesis contains common typographic issues, e.g., dashes, inconsistent quotation marks, or inconsistent title-case titles. Next time, please use a different style of listings – the used quotation marks look really bad.
— I suggest using a vector format of diagrams. Some of them are hard to read in the default resolution because the font is smaller than the base font of the text.
— Missing figure reference on page 48.

3. Non-written part, attachments 82 /100 (B)

The achieved practical result is a configured process in the UiPath Studio application. The process represents order management. I appreciate the attached demonstrating video. The prototype shows the ‘happy path’ of the process.

The attachments uploaded in the system KOS do not match the attachments listed in Appendix B. I hope the declared enclosed CD of the thesis satisfies this condition.

4. Evaluation of results, publication outputs and awards 80 /100 (B)

Based on the thesis, there are not enough presented industry case studies. I think the results achieved can be used for the next related works that can extend the prototype.

The overall evaluation 52 /100 (E)

The achieved practical result is a configured process in the existing application. The repeated violations of citation ethics in the main written part significantly affects my overall evaluation.
Instructions

Fulfillment of the assignment

Assess whether the submitted FT defines the objectives sufficiently and in line with the assignment; whether the objectives are formulated correctly and fulfilled sufficiently. In the comment, specify the points of the assignment that have not been met, assess the severity, impact, and, if appropriate, also the cause of the deficiencies. If the assignment differs substantially from the standards for the FT or if the student has developed the FT beyond the assignment, describe the way it got reflected on the quality of the assignment's fulfillment and the way it affected your final evaluation.

Main written part

Evaluate whether the extent of the FT is adequate to its content and scope: are all the parts of the FT contentful and necessary? Next, consider whether the submitted FT is actually correct – are there factual errors or inaccuracies?

Evaluate the logical structure of the FT, the thematic flow between chapters and whether the text is comprehensible to the reader. Assess whether the formal notations in the FT are used correctly. Assess the typographic and language aspects of the FT, follow the Dean's Directive No. 52/2021, Art. 3.

Evaluate whether the relevant sources are properly used, quoted and cited. Verify that all quotes are properly distinguished from the results achieved in the FT, thus, that the citation ethics has not been violated and that the citations are complete and in accordance with citation practices and standards. Finally, evaluate whether the software and other copyrighted works have been used in accordance with their license terms.

Non-written part, attachments

Depending on the nature of the FT, comment on the non-written part of the thesis. For example: SW work – the overall quality of the program. Is the technology used (from the development to deployment) suitable and adequate? HW – functional sample. Evaluate the technology and tools used. Research and experimental work – repeatability of the experiment.

Evaluation of results, publication outputs and awards

Depending on the nature of the thesis, estimate whether the thesis results could be deployed in practice; alternatively, evaluate whether the results of the FT extend the already published/known results or whether they bring in completely new findings.

The overall evaluation

Summarize which of the aspects of the FT affected your grading process the most. The overall grade does not need to be an arithmetic mean (or other value) calculated from the evaluation in the previous criteria. Generally, a well-fulfilled assignment is assessed by grade A.